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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/716,854 | 11/17/2000 | Hung Duy Vo | E0886 | 9608 |

7590 02/12/2004

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EXAMINER

MCLOUGHLIN, MICHAEL I

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2662

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,854

Applicant(s)

VO ET AL.

Examiner

Michael I McLoughlin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-19 is/are allowed.
- 6) ☒ Claim(s) 1-4,9 and 15 is/are rejected.
- 7) ☒ Claim(s) 5-8, and 10-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION***Drawings***

1. The drawings are objected to because Figure 9 has a decision flows from step 310 to step 314 and from 310 to step 320 that are not labeled. Per the specification in lines 30-31 of page 19 the flow from 310 to 314 should be the YES path, and per lines 4-5 of page 20 the flow from 310 to 320 should be the NO path. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

1. The disclosure is objected to because of the following informalities:
- In line 4 of page 7, “packet to be transmitted” probably has a typographical error and should be -packet is to be transmitted-
 - In line28 of page 7, “frames various priority levels” probably has a typographical error and should be -frames with various priority levels-
 - In line 5 of page 15, “gather from” probably has a typographical error and should be -gathered from-
 - IN line28 of page 15 there appears to be a typographical error and “filed” should be -field-
 - In line 6 of page 16, “determine of there” probably has a typographical error and should be -determine if there-

Appropriate correction is required.

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Claim Objections

2. Claim 14 objected to because of the following informalities: The phrase “the passing the frame”, where the examiner believes “the” intends to show antecedent basis reads awkwardly. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 9 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the specification does not adequately describe the process of “making a default selection between the MACs if the frame does not contain the embedded MAC select information and if the node discovery block does not contain node capability information regarding the destination node of the frame”.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by LIU et al. (U.S. 5,754,540), hereinafter referred to as LIU.

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7. Regarding claim 1, Liu discloses a method of communicating on a network medium, comprising: forming a frame in software; transmitting the frame to a network medium interface device which has a pair of media access controllers (MACs) (Liu discloses a multiport repeater in figure 1 that manages the physical layer transmit for a plurality of medium dependent interfaces see lines 48-50 in column 3 such as the pair of MACs 32 and 34 of figure 1 where the management is performed with a management frame, see line 56 of column 3. The multiport repeater may be coupled to an external network management device, see line 34 of column 3, and it is inherent that this external management device forms the management frame with software);

determining a selected MAC of the MACs which is to be used to transmit the frame (a TX or an FX MAC is selected for transmission based on a bit in the management frame see lines 21-28 in column 4, and see bits 8-15 of register 17 in column 20 where 1=TX MAC and 0=FX MAC); and

transmitting the frame onto the network medium using the selected MAC (see bits 0-7 of register 17 in columns 20-21 where a value of 1 enables transmit).

8. Regarding claim 2, Liu discloses the method of claim 1, and further discloses wherein the determining includes the network medium interface device checking the frame for embedded MAC selection information (checking the management frame for see lines 56-58 of column 3 for access to register 17 for selection of the TX or FX MAC).

9. Regarding claim 3, Liu discloses the method of claim 2, and further discloses wherein the checking includes checking the frame for a first bit which indicates whether the MAC selection information has been embedded (checking for bits 0-7 of register 17 for port enabled).

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10. Regarding claim 4, Liu discloses the method of claim 3, and further discloses wherein the determining includes, if the first bit indicates that the MAC selection information has been embedded in the frame (if bits 0-7 of register 17 indicates the port is enabled), checking a second bit of the frame, and using a value of the second bit to determine the selected MAC (checking bits 8-15 of register 17 and using the value of this bit to determine TX MAC if 1 and FX MAC if 0).

11. Regarding claim 15, Liu discloses the method of claim 1, and further discloses wherein the network medium includes telephone lines (unshielded twisted pair or UTP wire in line 56 in column 1)

Allowable Subject Matter

12. Claims 16-19 are allowed.

13. Claims 5-8, and 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claim 9 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, first paragraph, set forth in this Office action in item 4 above and to include all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: Prior art teaches a method for selecting a MAC on a network that has a plurality of MACs, but prior art found to date fails to teach a “node discovery block” that gathers and maintains network topology and MAC information.

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Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 1) Bhat et al. (U.S. 5,684,959), Method for determining topology of a network.
- 2) Ben-Michael et al. (U.S. 6,560,234), Universal premises distribution platform.
- 3) Richter et al. (U.S. 5,630,061), System for enabling first computer to communicate over switched network with second computer located within LAN by using MAC driver in different modes.
- 4) Zhao et al. (U.S. 5,313,466), Local synchronous bandwidth allocation in a token ring network.
- 5) Mahany (U.S. 5,546,397), High reliability access point for wireless LAN.
- 6) Beukema (U.S. 6,243,413), Modular home-networking communication system and method using disparate communication channels.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael I McLoughlin whose telephone number is 703-308-7911. The examiner can normally be reached on weekdays 7AM - 3:30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MSM

February 2, 2004


HASSAN KIZOU
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